REMARKS

This Amendment is filed in response to the Office Action mailed Dec. 15th, 2004. All objections and rejections are respectfully traversed.

Claims 1-20 are pending in the case.

Claims 18-20 have been added.

Claims 1, 3, 6, 8, 10, 12, 13, 14, 16, and 17 have been amended to better claim the invention.

At paragraphs 2-4 of the Office Action, claims 1-17 were rejected under 35 U.S.C. §112, second paragraph as being indefinite. Specifically, the Examiner cited a number of antecedent basis issues. The Applicant has amended the claims to address this rejection and believes each claim term should now have proper antecedent basis.

At paragraphs 5-11 of the Office Action, claims 1-3 and 5-17 were rejected under 35 U.S.C. §103(a) as being unpatentable over Lin et al., U.S. Patent Application Publication No. 2002/0073211, published on June 13, 2002 (hereinafter Lin).

Applicant's invention, as set forth in representative claim 1 comprises in part:

> 1. A load balancing system for distributing tasks to a processor resource of a processor pool, the system comprising:
>
> a memory organized into at least one memory block, each memory block configured to store a session;

an interface for coupling the memory to the processor resource, whereby the processor resource accesses the at least one memory block to update information associated with the session;

an access monitor coupled to the interface, wherein the access monitor recognizes and tracks memory cycles associated with the at least one memory block during a specified period of time and collects statistics associated with the session; and

a central resource coupled to the access monitor, the central resource arranged to receive the statistics from the access monitor, and, in response thereto, to assign tasks to the processor resource.

Lin teaches a load balancer (Fig. 2 and 3, item 128) interconnected to a plurality of webservers (Figs. 2 and 3, items 130, 132, 134). The load balancer receives and screens browser requests before sending them to a selected webserver. *See* Paragraph 0009. A browser interface (Fig, 2 item 202), internal to the load balancer, connects to, and reads packets from, the network. After the packets are read, a traffic flow measuring module (Fig, 2 item 204) analyzes the packets directed to each webserver. *See* Paragraph 0037. If a webserver looks to be overloaded, the load balancer redistributes requests among the webservers. *See* Paragraph 0037 and 0039)

The Applicant respectfully urges that Lin does not make obvious Applicant's claimed invention relating to "***an access monitor coupled to the interface, wherein the access monitor recognizes and tracks memory cycles associated with the at least one memory block during a specified period of time and collects statistics associated with the session.***"

Applicant's claimed invention tracks ***memory cycles*** associated with sessions executing on processors, and uses these statistics to assign tasks to the processors. By measuring memory activity, rather than other criteria, the Applicant is able to efficiently take into account the active or inactive status of pending tasks. Lin is completely silent concerning tracking memory cycles, and instead merely monitors the number of **tasks** (requests) assigned to each webserver. Lin, consequently, completely ignores the active or inactive status of the tasks. Applicant describes the inefficiencies of such an approach such in the background section the Application. Specifically, at page 3, lines 7-16

> However, a problem with such algorithms is that they do not take into consideration the "states" of the sessions. That is, although the number of sessions may have been balanced across the processors according to the algorithm(s), some of the sessions may be active, some relatively inactive and some completely inactive. For example, even though each processor within the processor pool may be assigned the same number of sessions, one processor may have a majority of active sessions (i.e., sessions exchanging information), whereas another processor may have a majority of inactive or "quiescent" sessions (i.e., sessions with no exchange of information).
>
> Thus equally distributing the sessions or tasks does not equally distribute the active work among the processor resources. To address this problem, the central load balancer may be configured to gather and monitor the states of the sessions assigned to each processor by utilizing a software-based pooling algorithm. However, this solution is expensive by consuming resources on behalf of the central load balancer and each processor of the processor pool.

Since Lin teaches many of the specific inefficiencies Applicant's novel invention was directed to address, Applicant's invention is clearly non-obvious in view of Lin.

The Applicant respectfully urges that Lin is legally insufficient to make obvious the presently claimed invention under 35 U.S.C. §103 because of the absence of Appli-

cant's claimed novel "***an access monitor coupled to the interface, wherein the access monitor recognizes and tracks memory cycles associated with the at least one memory block during a specified period of time and collects statistics associated with the session.***"

At paragraphs 12-13 of the Office Action, claim 4 was rejected under 35 U.S.C. §103(a) as being unpatentable over Lin in view of Bass et al., U.S. Patent No. 6,449,576, published on Sept. 10, 2002 (hereinafter Bass).

The Applicant notes that claim 4 is dependant from independent claim 1. The Applicant respectfully urges that independent claim 1 is in condition for allowance, and therefore claim 4 is also in condition for allowance.

In the event that the Examiner deems personal contact desirable in disposition of this case, the Examiner is encouraged to call the undersigned attorney at (617) 951-3078.

All independent claims are believed to be in condition for allowance.

All dependent claims are believed to be dependent from allowable independent claims.

Applicant respectfully solicits favorable action.

Please charge any additional fee occasioned by this paper to our Deposit Account No. 03-1237.

Respectfully submitted,

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